solving benefits accruing to others into a motive for action on one's own part. The strength of the motive for accumulating capital depends on a man's reason and on his altruism. Accumulation stops when a definite present benefit accruing to a man himself constitutes a motive for action outweighing the influence of another motive afforded by the prospect of an endless series of smaller benefits incapable of exact measurement and accruing mainly to the successors of the man whose action is to be influenced.

THE WAGES-FUND AT THE HANDS OF THE GERMAN ECONOMISTS.

BY PROFESSOR F. W. TAUSSIG, OF HARVARD UNIVERSITY.

Professor F. W. Taussig, of Harvard University, presented a paper on the treatment of the Wages-Fund doctrine by German economists. After noting the fact that English economists have paid little attention to the manner in which the Germans have discussed the theory of wages, the development of the wages-fund doctrine in England was briefly sketched, with special reference to Adam Smith and Ricardo. When fairly developed, the doctrine was attacked in 1834 by Hermann in Germany, long before English writers thought of doubting it. Hermann did not deny that wages were paid out of capital, but said that capital was only an intermediate source, and that the real ultimate source from which wages were paid lay in the income of the consumers who bought the products made by the laborers. This doctrine, that the real source of wages lies in consumer's income, has been almost universally accepted

by German economists as a substitute for the wages-fund theory. Some additions to it were made by Brentano in 1871, but the fundamental doctrine was accepted by him. Various contemporary German economists were considered, and their presentation of the theory of wages was shown to be a combination of the views of Hermann and Brentano.

Professor Taussig objected to this theory of the Germans that it led to reasoning in a circle, so far as general wages are concerned. Consumer's income was said to be the source of wages. But wages themselves were a very important part, probably the most important part, of consumer's income. Consequently wages, by this theory, were made to depend simply on wages. The theory made no attempt, and could give no aid, in determining how much of consumer's income was wages. Yet this was the precise problem of which a solution was sought. Consumer's income, and the direction in which it is spent, is a very important factor,—indeed, is *the* important factor,—in determining the wages of one set of laborers as compared with another. It determines whether the demand for labor shall be in one direction or in another, and whether particular groups of laborers shall get high or low wages. But it has no effect in making the general range of wages high or low. Some German economists are aware of this difficulty in their theory of wages, but it holds its place nevertheless in their books,

In conclusion, it was suggested that the real source of wages was to be found in the recurring supply of finished and consumable commodities which was being constantly produced and consumed. All hired laborers got their share of these commodities and

their real wages, by having money turned over to them by capitalists and employers. The wages-fund doctrine was right in looking at the advance of funds from capitalists to laborers as the first step in the process by which wages were determined. It needed to be corrected and supplemented by a consideration of the causes determining the supply of finished goods on which the laborers spent their money wages.

Discussion.

Professor Bemis: I desire to say just a few words. The writer of this paper, if I understood him aright, denied that a general rise of wages may be had at the expense of the consumer. I differ from him, because, as stated in his paper, there are consumers who are receivers of rent and profits and pensions, and other fixed sources of income, who are not themselves wage-workers, and therefore some of the burdens of an increased price due to increased demands of the workers can be shifted upon other consumers than the wage-earner.

I think we must give more and more attention to the growth of a large income-receiving class who are not in the competitive field, but are possessors of monopolies of one kind or another. They are also consumers, and the wage-earning class gets a considerable rise of wages through the increase of price, or perhaps more unusually, through a prevention, when improvements occur, of a fall in price of articles consumed by this class. This is especially true where the consumption is general, as the use of houses. Undoubtedly some of our recent rise in wages, or shortening in the labor day in the building trades, has come out of that class who have recently

built houses for their own use, but whose regular income is from rent or interest or profits.

In criticising, as Professor Taussig has so well done, past theories of wages, it is of course necessary to have one's own theory. I may, therefore, be permitted to add a word more, though not so directly connected with the paper just read:

Rise of wages may come out of monopoly profits, as on street-car lines, just as a tax would do. This field of monopoly profits is rapidly extending in competitive business. Wages may rise at the expense of profits for very brief or very long periods. Only the latter possibility interests us now. With growth of wealth and other factors, interests and profits on a given capital may decline. Any further increase that does not come out of the consumer or out of monopoly profits, or, in a slight degree, in long periods of time out of general profits, must come from the increase of the product in some form. Increase of wages through increase of product may come because of the workman's increase in efficiency, but not in that way only, as so many suppose. We are sometimes accustomed, when considering the eight-hour day, etc., to speak as if any increase in the rewards of the workman must come out of the increase of production in the individual workman; and we know that it often does come that way, or in the reverse way, to-wit: the increase of wages coming first may lead to the improvement of the standard of living, or as Professor Marshall would say, the standard of "life," and that in turn to an increase of personal efficiency. I think, however, with Mr. Gunton and many others, that an increased demand by the workers for wages may result in putting a temporary

pressure upon the employer, which may induce him to perfect and utilize improvements in machinery and industrial processes. The competition between one employer and another does that all the time, but the upward pressure of the wage-worker upon the employer hastens the introduction of improved processes and with those come greater production and greater absolute wages; although it is probably true, as Professor Clark pointed out in a valuable paper before our American Economic Association in December, 1888, and published in Volume IV of its proceedings, that in case of more rapid growth of capital than of labor, the wage-earner gets a less relative, while securing a larger absolute share of the product. When we compare the slowness with which inventions are introduced when wages are low with the rapidity with which they are introduced when workmen demand higher wages, we can see how the demands of the wage-worker can sometimes be satisfied without injury to anybody.

It also seems to me as if there was great importance in the position taken by General Walker, that the general development of society leads to the making common of industrial processes and inventions after the lapse of the life of the patent, and other improvements shortening the processes of industry, and thus improvements create truly a residual product; but I cannot see, with President Walker, that it naturally goes to wages as rent goes to the landowner, but rather that it is something to be bargained for between the various factors of production, the bargain being made not with reference to the present residual product, which must go to profits, it seems to me, but with reference to a future residual product.

The wage-worker of to-day bargains with the employer, regarding his share in a future residual product to be created by the improvements and processes constantly going on.

Professor Hadley: It seems to me that no small part of our economic misunderstandings has been due to the failure to appreciate the distinction between capital and capital goods in the way which Professor Clark brought it out. The difference between Adam Smith and Ricardo in the matter of the wages-fund theory, as it seems to me, was essentially this, that Adam Smith was talking about capital, and Ricardo about capital goods. Adam Smith's definition of capital is, that part of a *man's* stock which he expects to afford him revenue. Ricardo said, Capital is that part of a *nation's* wealth which is devoted to future production. The essential feature of the wage-fund theory is that it makes wages depend on capital goods, as distinct from capital; and, further, that it assumes that those capital goods are held by the capitalist, and are coincident with capital in the true sense. By distinguishing capital and capital goods, as Professor Clark has taught us, we can do much to separate the true and the false in the wage-fund theory, and reconcile views which are apparently in hopeless conflict.